

BEST AVAILABLE COPY

In the Claims

Applicant has submitted a new complete claim set indicating marked-up claims with insertions and deletions indicated by underlining and strikeouts, respectively.

Claims 1 and 11 are amended. Claims 4, 5, 12 and 13 are cancelled.

1. (currently amended) A driver circuit for driving a line in a network comprising:

first driving means for driving the line, said first driving means comprising a plurality of current sources arranged in a bridge configuration;

second driving means for driving the line; and

control means for selecting between the first and second driving means.

2. (previously presented) The driver circuit of claim 1, wherein the control means operates to make only one of said first or second driving means active at any one time.

3. (previously presented) The driver circuit of claim 1, wherein the control means comprises:

a logic control input signal for enabling and disabling the first driving means; and

a logical complement of the logic control signal for enabling and disabling the second driving means;

wherein, when one of the first or second driving means is enabled, the other driving means is disabled.

4. (canceled)

5. (canceled)

6. (Original) The driver circuit of claim 1, wherein the driver circuit is connected to a supply voltage and further comprises:

a plurality of terminating elements coupled to an output voltage of the driver circuit;

wherein the driver circuit operates to limit the output voltage to about one-half of the supply voltage.

FIRST AVAILABLE COPY

7. (Original) The driver circuit of claim 1, wherein the second driving means comprises a voltage source.

8. (previously presented) A driver circuit for driving lines in a network comprising:
a plurality of current sources connected in a bridge configuration and coupled to said lines to provide a bridge current driver;

a voltage source coupled to said lines to provide a voltage driver;

a plurality of terminating elements coupled to the current sources, the voltage source, and to said lines;

a supply voltages coupled to the bridge current driver and the voltage driver, wherein the supply voltages includes a mid-point termination voltage;

control means for selecting between the bridge current driver and the voltage driver, such that, when the bridge current driver is selected, the terminating elements are coupled to the mid-point termination voltage and the lines are driven from the bridge current driver; and

when the voltage driver is selected, the bridge current driver is disabled and the terminating elements are coupled to the voltage driver.

9. (Original) The driver circuit of claim 8, wherein the mid-point termination voltage is approximately equal to one-half the supply voltage.

10. (Original) The driver circuit of claim 8, wherein the terminating elements comprise a network of resistors.

11. (currently amended) A line driver circuit comprising:

a current source coupled to a first pair of terminals of a termination network, the current source comprising a plurality of current sources arranged in a bridge configuration; and

a voltage source coupled to a second pair of terminals of the termination network;

wherein the line driver circuit operates in a first configuration to establish a first mode of operation, and in a second configuration to establish a second mode of operation.

BEST AVAILABLE COPY

12. (canceled)

13. (canceled)

14. (Original) The line driver circuit in accordance with claim 11, wherein the first mode of operation comprises voltage source drive mode.

15. (Original) The line driver circuit in accordance with claim 14, wherein the first configuration of the line driver circuit corresponding to voltage source drive mode comprises driving the second pair of terminals of the termination network with the voltage source while the current source is maintained in an OFF state.

16. (Original) The line driver circuit in accordance with claim 11, wherein the second mode of operation comprises current source drive mode.

17. (Original) The line driver circuit in accordance with claim 16, wherein the second configuration of the line driver circuit corresponding to current source drive mode comprises driving the first pair of terminals of the termination network with the current sources while the voltage source maintains the second pair of terminals of the termination network at a predetermined, non-zero potential.

18. (Original) The line driver circuit in accordance with claim 17, wherein the predetermined, non-zero potential comprises one-half of line driver circuit supply voltage.

19. (Original) The line driver circuit in accordance with claim 11, wherein the termination network comprises a resistive termination network.

BEST AVAILABLE COPY

20. (Original) The line driver circuit in accordance with claim 19, wherein the resistive termination network comprises a pair of resistors with the voltage source outputs coupled to a first end of each resistor and the current source outputs coupled to a second end of each resistor.
21. (Original) A method for providing multi-mode driver capability, the method comprising the steps of:
 - (a) providing a line driver circuit including both a current source and a voltage source;
 - (b) selecting a first or second mode of operation;
 - (c) operating the line driver circuit in a first configuration when the first mode of operation is selected; and
 - (d) operating the line driver circuit in a second configuration when the second mode of operation is selected.